CITY OF SAN ANTONIO PURCHASING & GENERAL SERVICES DEPARTMENT

Issued By: DG/
BID NO.: A967-06 DG

Date Issued: August 26, 2005
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FORMAL INVITATION FOR BIDS ANNUAL CONTRACT FOR PEDESTRIAN COUNTDOWN TIMERS

Sealed bids in triplicate, subject to the Terms and Conditions of this Invitation for Bids and other contract provisions, will be received at the office of the City Clerk, City Hall until 2:00 p.m. Central Time **SEPTEMBER 12, 2005**.

The City of San Antonio Purchasing Department is willing to assist any bidder(s) in the interpretation of bid provisions or explanation of how bid forms are to be completed. Assistance can be received by visiting the Purchasing Office in the City Hall Annex, 131 W. Nueva, or by calling (210) 207-7260.

It is the policy of the City of San Antonio to involve qualified Small, Minority, Woman-owned, and local business in construction, procurement, professional services, and leases and concessions contracting. The City of San Antonio has established the following minority business enterprise (MBE), woman business enterprise (WBE), African-American business enterprise (AABE), and small business enterprise (SBE) utilization goals:

MBE Goal: <u>15%</u> WBE Goal: <u>10%</u> AABE Goal: <u>3%</u> SBE Goal: <u>50%</u>

This invitation includes these forms:

Bid Invitation Specifications and General Requirements

Torms and Conditions of Invitations for Dids

Price Sales date

Price Sales date

Terms and Conditions of Invitations for Bids Price Schedule

The undersigned, by his/her signature, represents that he/she is authorized to bind the bidder to fully comply with the Specifications and General Requirements for the amount(s) shown on the accompanying bid sheet(s). By signing below, you have read the entire document and agreed to the terms therein.

Firm Name:	Telephone	e Number:	
Address:	City, State	e, Zip Code:	
Signature of Person Authorized to Sign	Bid Signer's N	Name:	(Please Print or Type)
Please complete the following: Email Address:			
Email Address: Prompt Payment Discount:%_ Please check the following blanks which	days. (If no discount is apply to your company:	offered, Net 30 w	vill apply.)
Ownership of firm (51% or more):			
Non-minorityHispanic Female Owned Handicapped Owned Indicate Status:PartnershipC Tax Identification Number:	orporationSole Proprieto	orshipOthe	r (specify)
FOR CITY USE ONLY	AWARD		
Items Accepted:	Ordinance No:	Date:	Amount:
Approved:			CITY OF SAN ANTONIO

TERMS AND CONDITIONS OF INVITATION FOR BIDS

READ CAREFULLY

1. GENERAL CONDITIONS

Bidders are required to submit their bids upon the following expressed conditions:

- (a) Bidders shall thoroughly examine the drawings, specifications, schedule(s), instructions and all other contract documents.
- (b) Bidders shall make all investigations necessary to thoroughly inform themselves regarding plant and facilities for delivery of material and equipment as required by the bid conditions. No plea of ignorance by the bidder of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the bidder to make the necessary examinations and investigations, or failure to fulfill in every detail the requirements of the contract documents, will be accepted as a basis for varying the requirements of the City or the compensation to the vendor.
- (c) Bidders are advised that all City contracts are subject to all legal requirements provided for in the City Charter and/or applicable City Ordinances, state and federal statutes. Any bid, after being opened, becomes subject to the Open Information Act, Government Code Chapter 552, therefore bidders must clearly indicate any portion of the submitted bid that the bidder claims is not subject to public inspection under the Open Information Act.
- (d) No officer or employee of the City shall have a financial interest, direct or indirect, in any contract with the City, or shall benefit financially, directly or indirectly, in the sale to the City of any materials, supplies or services, except on behalf of the City as an officer or employee. This prohibition extends to the City Public Service Board, San Antonio Water System, and all City boards and commissions other than those which are purely advisory. In this instance a City employee is defined as any employee of the City who is required to file a financial involvement report pursuant to the City's ethics ordinance.

2. PREPARATION OF BIDS

Bids will be prepared in accordance with the following:

- (a) All information required by the bid form shall be furnished or the bid may be deemed non responsive. The bidder shall print or type name and manually sign the Invitation for Bids.
- (b) Where there is a discrepancy between the unit price and the extended price, the unit price shall prevail.
- (c) Any bid that is considered for award on an "all or none" basis must include a price quote for all units or line items. Any bid that is considered for award by each unit or line item must include a price for each unit or line item for which the bidder wishes to be considered. Any ambiguity in the bid as a result of omission, error, unintelligible or illegible wording shall be construed in the favor of the City.
- (d) Alternate bids may be allowed at the sole discretion of the City.
- (e) Bidders will neither include federal taxes nor State of Texas limited sales excise and use taxes in bid prices since the City of San Antonio is exempt from payment of such taxes. An exemption certificate will be signed by City where applicable upon request by bidder.

3. DESCRIPTION OF SUPPLIES

Any catalog or manufacturer's reference used in describing an item is merely descriptive, and not restrictive, unless otherwise noted, and is used only to indicate type and quality of material. Each bid must clearly identify the proposed product, the quantity of the product, model, and type, as applicable. Prorata adjustments to packaging and pricing may be allowed at the sole discretion of the City.

4. ASSURANCE OF COMPLIANCE - EQUAL EMPLOYMENT OPPORTUNITY AND SMALL AND/OR MINORITY BUSINESS ADVOCACY REQUIREMENTS

It is the policy of the City of San Antonio that Small and/or Minority Business Enterprises shall have the maximum practicable opportunity to participate in the performance of public contracts. Bidder agrees that if this bid is accepted, he/she will not engage in employment practices which have the effect of discriminating against employees or prospective employees because of race, color, religion, national origin, sex, age, handicap or political belief or affiliation. In addition, bidder agrees, by submittal of this bid, that he/she will abide by all applicable terms and provisions of this Nondiscrimination Clause and the Small Business Advocacy Clause. These clauses are available in the City's Department of Economic and Employment Development and the City Clerk's Office.

5. SAMPLES, DEMONSTRATIONS AND TESTING

At the City's request and direction, bidder shall provide product samples and/or testing of items bid to ensure compliance with specifications. Samples, demonstrations and/or testing may be requested prior to award of the contract, upon delivery and/or at any point during the term of resulting contract. After notification, samples, demonstrations and/or testing must be provided within **ten** days. Failure to provide samples prior to award of contract will disqualify bidder from consideration. All samples (including return thereof), demonstrations and/or testing shall be at the expense of the bidder. Samples will be returned upon request; otherwise, samples will become property of the City of San Antonio, **ten** days after award of the contract.

6. SUBMISSION OF BIDS

- (a) **Bids in triplicate** shall be enclosed in sealed envelopes addressed to the City Clerk, City of San Antonio. The name and address of bidder, the date and hour of the bid opening, bid number and title of the bid solicitation shall be marked on the outside of the envelope(s).
- (b) Bids must be submitted on the forms furnished. Facsimile bids must be submitted in accordance with Par. 6 (a) above. Bids, however, may be modified provided such modifications are sealed and received by the City Clerk prior to the time and date set for the bid opening. However, the City of San Antonio shall not be responsible for lost or misdirected bids or modifications.
- (c) By submittal of this bid, bidder certifies to the best of his/her knowledge that all information is true and correct.

7. REJECTION OF BIDS

- (a) The City may reject a bid if:
 - 1. The bidder misstates or conceals any material fact in the bid; or
 - 2. The bid does not strictly conform to law or the requirements of the bid;
 - 3. The bid is conditional, except that the bidder may qualify the bid for acceptance by the City on an "All or None" basis or a "Low Item" basis. An "All or None" basis bid must include all items upon which bids are invited.

- (b) In the event that a bidder is or subsequently becomes delinquent in the payment of his, her or its City taxes, including state and local sales taxes, such fact shall constitute grounds for rejection of the bid, or if awarded the bid, for cancellation of the contract. However, the City reserves the right to deduct any delinquent taxes from payments that the City may owe to the delinquent bidder as a result of such contract.
- (c) The City may, however, reject all bids whenever it is deemed in the best interest of the City to do so, and may reject any part of a bid unless the bid has been qualified as provided in Par. 7 (a) 3 above. The City at its sole discretion may also waive any minor informalities or irregularities in any bid, to include failure to submit sufficient bid copies, failure to submit literature or similar attachments, or business affiliation information.

8. WITHDRAWAL OF BIDS

Bids may not be withdrawn after the time set for the bid opening, unless approved by the City Council.

9. LATE BIDS OR MODIFICATIONS

Bids and modifications received after the time set for the bid opening will not be considered.

10. CLARIFICATION TO BID SPECIFICATIONS

- (a) If any person contemplating submitting a bid for this contract is in doubt as to the true meaning of the specifications, other bid documents, or any part thereof, he/she may submit to the City Director of Purchasing on or before seven calendar days prior to scheduled opening, a request for clarification. All such requests for information shall be made in writing and the person submitting the request will be responsible for its prompt delivery. Any interpretation of the bid, if made, will be made only by Addendum duly issued. A copy of such Addendum will be mailed or delivered to each person receiving bids. The City will not be responsible for any other explanation or interpretation of the proposed bid made or given prior to the award of the contract. Any objections to the specifications and requirements as set forth in this bid must be filed in writing with the Director of Purchasing on or before seven calendar days prior to the scheduled opening.
- (b) The City reserves the right to request clarification to assist in evaluating the bidder's response when the bid response is unclear with respect to product pricing, packaging or other factors. The information provided is not intended to change the bid response in any fashion and such information must be provided within **two** days from request.

11. DISCOUNTS

- (a) Prompt payment discounts will be considered in making the award provided the period of the discount offered is sufficient to permit payment within such period in the regular course of business (minimum ten days).
- (b) In connection with any discount offered, time will be computed from the date of receipt of supplies or services, or from the date a correct invoice is received, whichever is the later date. Payment is deemed to be made on the date of mailing of the check.

12. AWARD OF CONTRACT

- (a) Per Section § 252.043 of the Texas Local Government Code, the contract will be awarded to either the lowest responsible bidder or to the bidder who provides goods and/or services at the best value for the City. In determining best value, the City may consider price, reputation, quality, past relationship with City, SBEDA requirements, long term cost and any other relevant factors.
- (b) The City reserves the right to accept any item or group of items on this bid, unless the bidder qualifies his/her bid by specific limitations. Re Par.7 (a) 3 above.
- (c) A written award of acceptance (manifested by a City Ordinance) and appropriation mailed or otherwise furnished to the successful bidder results in a binding contract without further action by either party.
- (d) The City of San Antonio reserves the right to utilize previous purchases as a basis for evaluation of bids when future usages are unable to be determined.
- (e) Breaking of tie bids shall be in accordance with the Texas Local Government Code § 271.901.
- (f) Although the information furnished to bidders specified the approximate quantities needed, based on the best available information where a contract is let on a unit price basis, payment shall be based on the actual quantities supplied. The City reserves the right to delete items, prior to the awarding of the contract, and purchase said items by other means; or after the awarding of the contract, to increase or decrease the quantities bid in accordance with § 252.048 of the Texas Local Government Code. No changes shall be made without written notification of the City.

13. CONTRACT TERMINATION

TERMINATION-BREACH:

(a) Should vendor fail to fulfill in a timely and proper manner, as determined solely by the Director of Purchasing & General Services, its obligations under this contract, or violate any of the terms of this contract, the City shall have the right to immediately terminate the contract. Notice of termination shall be provided in writing to the contractor, effective upon the date set forth in the notice. Such termination shall not relieve the vendor of any liability to the City for damages sustained by virtue of any breach by the vendor.

TERMINATION-NOTICE:

(b) Either party may cancel the contract at any time after award. The City shall be required to give the vendor notice **thirty** days prior to the date of cancellation of the contract. The vendor shall be required to give the City written notice **sixty** days prior to the date of cancellation of the contract.

TERMINATION-FUNDING:

(c) City retains the right to terminate this contract at the expiration of each of City's budget periods. This contract is conditioned on a best efforts attempt by City to obtain and appropriate funds for payment of any debt due by City herein.

14. DELIVERY OF GOODS/SERVICES

(a) All materials are to be delivered F.O.B., City of San Antonio's designated facility.

- (b) Delivery dates pertaining to this invitation must be clearly stated in the bid form where required and include weekends and holidays. Failure to comply with this requirement may be a cause for disqualification of the bid. Unless otherwise specified, delivery at the earliest date is required. The bidder will clearly state in the bid the time required for delivery upon receipt of contract or purchase order. Proposed delivery time must be specific and such phrases "as required", "as soon as possible" or "prompt" may result in disqualification of the bid.
- (c) Upon award of a contract, the vendor is obligated to deliver the goods to the destination specified in the Invitation for Bids or the Purchase Order and bears the risk of loss until delivery. If this Invitation for Bids or Purchase Order does not contain delivery instructions, bidders shall request instructions in writing from the Director of Purchasing. If the delivery instructions contained in the Invitation for Bids allocate delivery costs and risks in a manner contrary to this section, the provisions of this Invitation for Bids shall prevail.
- (d) When delivery is not met as provided for in the contract, the Purchasing Department reserves the right to make the purchase on the open market, with any cost in excess of the contract price paid by the vendor, in addition to any other damages, direct or consequential, incurred by the City as a result thereof. In addition, failure of the vendor to meet the contract delivery dates will be cause for removal of the vendor from the City's list of eligible bidders as determined by the Purchasing & General Services Department.

15. PERFORMANCE DEPOSIT

- (a) The following provisions shall apply only when a performance deposit is specified as required in this Invitation for Bids
- (b) The successful vendor must furnish the City of San Antonio with a performance deposit in the amount set forth in the Invitation For Bids. This deposit is not to be submitted with the bid, but must be presented to the Purchasing & General Services Department within **ten** days from request.
- (c) The City of San Antonio will not enter into a contract or issue a purchase order until the successful vendor has complied with the performance deposit provisions.
- (d) The performance deposit shall be in the form of a performance bond (in a form acceptable to the City Attorney), cashier's check, certified check upon a state or national bank or trust company, or a check on such bank or trust company signed by a duly authorized officer thereof (checks to be drawn payable to the City of San Antonio), or a Certificate of Deposit from such bank or trust company assigned to the City of San Antonio, or an irrevocable letter of credit from a state or national bank or trust company.
- (e) The performance deposit of the successful vendor shall be returned by the City upon completion of the contract and final acceptance of all items in accordance with conditions thereof.
- (f) Failure of successful vendor to perform any of the services required by this contract within **ten** days of receipt of written demand for performance from City, or failure of vendor to correct or replace defective goods or products within **ten** days from receipt of written demand therefore, shall constitute a total breach of this contract and shall cause this contract to terminate immediately upon the expiration of the ten day period. In the event of such termination, the performance deposit shall be retained by the City of San Antonio as liquidated damages, based upon mutual agreement and understanding between vendor and City at the time this bid is solicited, submitted and accepted, that the City of San Antonio is a governmental agency engaged in public projects, and that the measurement of damages, which might result from a breach of the terms and specifications herein is difficult or impossible to determine. However, the Director of Purchasing & General Services with the concurrence of the City Manager, may return all or part of the performance deposit to the vendor if the Director determines, in the Director's sole discretion, that the failure to perform the conditions

of this contract was the result of acts or events over which the vendor had no control. The determination shall then be final and binding on all parties.

16. INDEPENDENT CONTRACTOR

It is expressly understood and agreed by both parties hereto that the City is contracting with the successful vendor as an independent contractor. The parties hereto understand and agree that the City shall not be liable for any claims which may be asserted by any third party occurring in connection with the services to be performed by the successful vendor under this contract and that the successful vendor has no authority to bind the City.

17. BID RESULT REQUEST

Any party who wishes to be provided documents relating to the bid results shall make a request in writing. Pursuant to state law, the City may assess a fee in order to recoup the cost related to providing the requested information.

18. PATENTS/COPYRIGHTS

The successful vendor agrees to indemnify and hold the City harmless from any claim involving patent infringement or copyrights on goods supplied.

19. INDEMNITY

- CONTRACTOR covenants and agrees to FULLY INDEMNIFY and HOLD HARMLESS, the CITY and (a) the elected officials, employees, officers, directors, and representatives of the CITY, individually or collectively, from and against any and all costs, claims, liens, damages losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal injury or death and property damage, made upon the CITY, directly or indirectly arising out of resulting from or related to CONTRACTOR'S activities under this CONTRACT, including any acts or omissions of CONTRACTOR, any agent, officer, director, representative, employee, consultant or subcontractor of CONTRACTOR, and their respective officers, agents, employees, directors and representatives while in the exercise or performance of the rights or duties under this CONTRACT, all without, however, waiving any governmental immunity available to the CITY under Texas Law and without waiving any defenses of the parties under Texas Law. The provisions of this INDEMNIFICATION are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity. **CONTRACTOR** shall promptly advise the **CITY** in writing of any claim or demand against the CITY or CONTRACTOR known to CONTRACTOR related to or arising out of CONTRACTOR'S activities under this CONTRACT and shall see to the investigation and defense of such claim or demand at CONTRACTOR'S cost. The CITY shall have the right, at its option and at its own expense, to participate in such defense without relieving **CONTRACTOR** of any of its obligations under this paragraph.
- (b) It is the EXPRESS INTENT of the parties to this contract, that the INDEMNITY provided for in this section, is an INDEMNITY extended by CONTRACTOR to INDEMNIFY, PROTECT and HOLD HARMLESS the CITY from consequences of the CITY'S OWN NEGLIGENCE, provided however, that the INDEMNITY provided for in this section SHALL APPLY only when the NEGLIGENT ACT of the CITY is a CONTRIBUTORY CAUSE of the resultant injury, death, or damage, and shall have no application when the negligent act of the CITY is the sole cause of the resultant injury, death, or damage. CONTRACTOR further AGREES TO DEFEND, AT ITS OWN EXPENSE and ON BEHALF OF THE CITY AND IN THE NAME OF THE CITY, any claim or litigation brought against the CITY and its elected officials, employees, officers, directors and representatives, in connection with any such injury, death, or damage for which this INDEMNITY shall apply, as set forth above.

20. INSURANCE

If required, specific insurance provisions will be included in bid specifications. An original, certified copy of an insurance certificate must be submitted within **ten** days from request. The successful vendor will be required to maintain, at all times during performance of the contract, the insurance detailed in bid specifications. Failure to provide this document may result in disqualification of bid.

21. ACCEPTANCE BY CITY

The City shall have a reasonable time (but not less than 30 days) after receipt to inspect the goods and services tendered by vendor. The City at its option may reject all or any portion of such goods or services which do not, in City's sole discretion, comply in every respect with all terms and conditions of the contract. The City may elect to reject the entire goods and services tendered even if only a portion thereof is nonconforming. If the City elects to accept nonconforming goods and services, the City, in addition to its other remedies, shall be entitled to deduct a reasonable amount from the price thereof to compensate the City for the nonconformity. Any acceptance by the City, even if non-conditional, shall not be deemed a waiver or settlement of any defect in such goods and services.

22. WARRANTY

The supplies or services furnished under this contract shall be covered by the most favorable commercial warranties given to any customer for same or similar supplies or services.

23. CHANGE ORDERS

No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders will be made in writing by the City of San Antonio Purchasing & General Services Department.

24. ASSIGNMENT

The successful vendor shall not sell, assign, transfer or convey this contract in whole or in part, without the prior written consent of the City of San Antonio Purchasing & General Services Department. Any such assignment or transfer shall not release vendor from all contractual obligations.

25. INTERLOCAL PARTICIPATION

- (a) The City may, from time to time, enter into Interlocal Cooperation Purchasing Agreements with other governmental entities or governmental cooperatives (hereafter collectively referred to as "Entity" or "Entities") to enhance the City's purchasing power. At the City's sole discretion and option, City may inform other Entities that they may acquire items listed in this Invitation for Bids (hereafter "IFB"). Such acquisition(s) shall be at the prices stated herein, and shall be subject to bidder's acceptance. Entities desiring to acquire items listed in this IFB shall be listed on a rider attached hereto, if known at the time of issuance of the IFB. City may issue subsequent riders after contract award setting forth additional Entities desiring to utilize this bid. VENDOR shall sign and return any subsequently issued riders within ten calendar days of receipt.
- (b) In no event shall City be considered a dealer, remarketer, agent or other representative of Vendor or Entity. Further, City shall not be considered and is not an agent; partner or representative of the Entity making purchases hereunder, and shall not be obligated or liable for any such order.
- (c) Entity purchase orders shall be submitted to Vendor by the Entity.

(d) Vendor authorizes City's use of Vendor's name, trademarks and Vendor provided materials in City's presentations and promotions regarding the availability of use of this contract. The City makes no representation or guarantee as to any minimum amount being purchased by City or Entities, or whether Entity will purchase utilizing City's contract.

CITY WILL NOT BE LIABLE OR RESPONSIBLE FOR ANY OBLIGATIONS, INCLUDING, BUT NOT LIMITED TO, PAYMENT, AND FOR ANY ITEM ORDERED BY AN ENTITY OTHER THAN CITY.

26. QUESTIONS

Questions regarding interpretation of bids, bid results or bid awards should be directed to the Purchasing & General Services Department at (210) 207-7260 and referenced by bid number.

SPECIFICATIONS AND GENERAL REQUIREMENTS

<u>SCOPE</u>: The City of San Antonio is soliciting bids to furnish pedestrian countdown timers with the specifications listed herein. These countdown timers are pedestrian crosswalk signals with an illuminated LED countdown timer showing time allowed for pedestrian crossing.

<u>PERIOD OF CONTRACT:</u> Contract shall be for the period beginning upon award and terminating September 30, 2006.

The City of San Antonio reserves the right to extend the contract period for one (1), one-year periods based on the initial bid submitted, should such an extension be in the best interest of the City of San Antonio. Said renewals shall be effected by a signed writing, executed by the parties, establishing the mutual consent to renew the Contract and the term of the renewed and extended Contract. The Director of the Purchasing & General Services Department shall be the party designated with authority to effect said renewal on behalf of the City, without further action by the San Antonio City Council, provided funding is appropriated therefore.

STANDARD REQUIREMENTS:

- A. Prospective bidders must prove beyond any doubt to the City Purchasing Agent that they are duly qualified, capable, bondable, etc. to fulfill and abide by the specifications herein listed.
- B. THE CITY OF SAN ANTONIO WILL MAKE AWARD TO ONE FIRM ONLY.
- C. When contractor cannot abide by terms and conditions in fulfilling the contract, contractor must supply service or supplies from other sources at the contract price. If contractor delays in the above, the City reserves the right to purchase on the open market and charge contractor the difference between contract price and the purchase price.
- D. The annual contract shall include the following terms and conditions:
 - 1. An annual contract purchase order will be issued for each City agency authorized to place orders against this annual contract. Vendor must have the Contract Purchase Order before making any delivery. Payment will be made by the City on a monthly basis.
 - 2. All invoices must be submitted in duplicate and show each purchase order number and corresponding City agency. Invoices must be legible. Items billed on invoices must be specific as to applicable stock, manufacturer, catalog or part number (if any). All items must show unit prices or otherwise specified. If prices are based on discounts from list, then list prices, discounts in terms of percentage, and net prices must be shown. If prices are based on list prices basis, then the list prices, the "plus" in terms of percentage, and net unit prices, extensions and net total prices must be shown. In connection with any term discount offered, time will be computed from the first of the month following receipt of supplies or services, or a correct invoice. Payment is deemed to be made on the date of mailing of the check. (Paragraph 11B on the Terms and Conditions of Invitations for Bids is hereby deleted.)
 - 3. Bidders' facilities and equipment will be a determining factor in making the bid award. All bidders may be subject to inspection of their facilities and equipment.

- E. Any materials or parts used in complying with contract are to be equal to or better than original equipment.
- F. Prices must remain firm for the duration of the contract period.
- G. The City reserves the right to extend the term of the contract in 30 day increments, not to exceed 90 days total with written notice to the vendor; provided, that the City shall give the vendor a preliminary written notice of its intent to extend at least 10 days before the contract expires. The preliminary notice does not commit the City to an extension.

SPECIFICATIONS:

GENERAL

The purpose of this specification is to provide the minimum performance requirements for the LED "walking person" and "hand" icon pedestrian signal modules with countdown (hereafter called module or modules). This specification includes the following size(nominal overall message bearing surface): 406 x 457 mm (16 x 18 in) (countdown only). This specification is not intended to impose restrictions upon specific designs and materials that conform to the purpose and the intent of this specification. This specification refers to definitions and practices described in "Pedestrian Traffic Control Signal Indications" published in the *Equipment and Materials Standards of the Institute of Transportation Engineers*, (referred to in this document as "PTCSI") and in the Manual on Uniform Traffic Control Devices (MUTCD), 2003 edition.

PHYSICAL AND MECHANICAL REQUIREMENTS

A. General

Modules designed as retrofit replacements for existing pedestrian signal indication lamps shall not require special tools for installation. Retrofit replacement modules shall fit into existing pedestrian signal housings built for the PTCSI sizes stated in Section 1 of the "walking person" and "hand" icon pedestrian signal indication Standard without modification to the housing. See PTCSI 4.2.1 for housing sizes. All LED's used shall be rated for 100,000 hours of continuous operation over a temperature range of -40°C to +74°C. The modules shall be rated for a minimum life of 72 months. Modules shall meet all parameters of this specification throughout this 72-month period. Installation of a retrofit replacement module into an existing pedestrian signal housing shall only require the removal of the existing optical unit components, i.e., lens, lamp module, gaskets, and reflector; shall be weather tight and fit securely in the housing; and shall connect directly to existing electrical wiring.

B. The Module

The retrofit module shall be capable of replacing the optical unit. The module lens may be a replaceable part without the need to replace the complete module. The walking person and hand icons (16"x18" size only) shall be full (not outlines). The countdown digits shall be made up of two rows of LEDs. Each digit shall be a minimum of seven inches in height. The configurations of the walking person icon and hand icon are illustrated in Figure 1 and Figure 2 respectively.



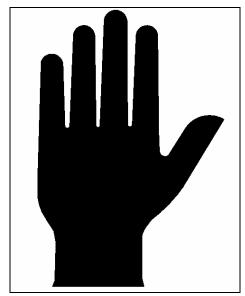


Figure 1.

Figure 2.

Dimensions for Figure 1 and Figure 2

For each nominal message bearing surface (module) size, use the corresponding H (height) and W (width):

Bearing	Module Size	Icon	Icon	Countdown	Countdown
Surface		Height	Width	Height	Width
Н	(16 x 18 in)	Min 7 in	7 in	Min 9 in	6.5 in

Note: The units shall not have any attachments or options that will allow the mode to be changed from counting the clearance cycle, to the full walk/don't walk cycle.

C. Environmental Requirements

The module shall be rated for use in the ambient operating temperature range, measured at the exposed rear of the module, of -40 to +74°C (-40 to +165°F). The pedestrian module shall be designed to meet NEMA 250 Hose down Test. The test is to be conducted on a stand-alone unit. No protective housing shall be used. The module lens shall be UV stabilized.

D. Construction

The module shall be a single, self-contained device, not requiring on-site assembly for installation into existing traffic signal housing. The power supply shall be designed to fit and mount inside the pedestrian signal module. The assembly and manufacturing process for the module shall be designed to assure all internal LED

and electronic components are adequately supported to withstand mechanical shock and vibration from high winds and other sources.

E. Signal LENS

- 1. The lens of the LED pedestrian and countdown signal modules shall be polycarbonate UV stabilized and a minimum of ½" thick.
- 2. The exterior of the lens of the LED pedestrian and countdown signal module shall be smooth and frosted to prevent sun phantom.

F. Materials

Materials used for the lens and LED module construction shall conform to ASTM specifications where applicable. Enclosures containing the power supply and electronic components of the LED module shall be made of UL94VO flame retardant materials. The lens of the LED module is excluded from this requirement.

G. Module Identification

Each module shall be identified on the backside with the manufacturer's name, model numbers and serial number. The following operating characteristics shall be identified: nominal voltage, power consumption, wattage and Volt-Ampere.

PHOTOMETRIC REQUIREMENTS

A. Luminance, Uniformity & Distribution:

For a minimum period of 72 months, the maintained minimum luminance values for the modules under the operating conditions defined in Sections 2.3.1 and 4.2.1, shall not be less than the values shown Reference 1 and Reference 2 for the walking person and hand icons respectively, when measured perpendicular to the surface of the module at nine (nine) separate points on the icon. These values may decrease up to 50% of these table values beyond 15° from the perpendicular in either to the left or right on a horizontal plane.

Reference 1. Maintained Minimum Luminance value for the Walking Person icon of the Module (candelas/meter square):

5300 cd/m^2

Reference 2. Maintained Minimum Luminance value for the Hand icon of the Module (candelas/meter square):

3750 cd/m^2

The uniformity of the walking person and hand icons' illumination shall meet a ratio of not more than 1 to 5 between the minimum and maximum luminance measurements (in Cd/m2).

B. Chromaticity

The standard colors for the LED Pedestrian Signal Module shall be White for the walking person and Portland Orange for the hand icon and countdown digits.

ELECTRICAL

A. General

The modules shall be operationally compatible with traffic signal controllers, cabinets and accessories manufactured to the California Department of Transportation (Caltrans) Traffic Signal Control Equipment Specifications, January 1989 Edition.

Maximum power consumption requirements for each indication are as follows (in Watts):

I-con	25 C	74 C
Hand	10.0W	12.0W
Waking Person	9.0W	12.0W
Countdown 2 digit	8.0W	11.0W

All wiring and terminal blocks shall meet the requirements of Section 13.02 of the VTCSH Standard. Three secured, color coded, 914 mm (36 in) long 600 V, 16 AWG minimum, jacketed wires, conforming to the National Electrical Code, rated for service at +105°C, are to be provided for electrical connection.

Each LED signal module shall be designed so that there is no noticeable light output when connected to rated voltage through an impedance of 15 Kohm (either resistive or capacitive). The signal module shall be designed so that, under normal operation, an AC voltage of no greater than 10 volts RMS shall be developed across the unit when it is connected in series with any value of impedance greater than 15 Kohms and for any applied AC voltage between 95 and 135 volts RMS that is connected across this series combination. In addition, the signal module shall be designed so that the voltage across the module shall reduce in value to less than 10 volts RMS within 100 msec when the module is switched off by any solid state switch or switch pack having an impedance of 15 Kohms or greater.

B. Voltage Range

LED modules shall operate from a 60 ± 3 Hertz ac line power over a voltage range from 80 to 135 VAC RMS. The current draw shall be sufficient to ensure compatibility and proper triggering and operation of load current switches and conflict monitors. Nominal operating voltage for all measurements shall be 120 ± 3 Volts rms. Fluctuations in line voltage over the range of 80Vac to 135Vac shall not affect luminous intensity by more than ± 10 %. The LED circuitry shall prevent flickering at less than 100 Hz over the voltage range stated above. The modules shall be designed and constructed so that the failure of a single LED will not result in the loss of additional LEDs.

Low Voltage Turn Off: There should be no illumination of the module when the applied voltage is less than 35 VAC RMS. To test for this condition the each icon must first be fully illuminated at the nominal operating voltage. The applied voltage shall then be reduced to the point where there is no illumination. This point must be greater than 35 VAC RMS.

Turn-On and Turn-Off Time: The each icon of the module shall reach 90% of their full illumination (turn-on) within 100 ms. of the application of the nominal operating voltage. The modules shall not be illuminated (turn-off) after 100 ms. of the removal of the nominal operating voltage.

For abnormal conditions when nominal voltage is applied to the unit across the two-phase wires (rather than being applied to the phase wire and the neutral wire) the pedestrian signal unit shall default to the hand symbol.

C. Transient Voltage Protection

The module's on-board circuitry shall include voltage surge protection to withstand high-repetition noise transients and low-repetition high-energy transients as stated in Section 2.1.6, NEMA Standard TS-2, 1998, or the latest version.

D. Electronic Noise

The modules and associated on-board circuitry must meet Federal Communications Commission (FCC) Title 47, Sub Part B, Section 15 regulations concerning the emission of electronic noise.

E. Power Factor (PF) and AC Harmonics

The modules shall provide a power factor of 0.90 or greater when operated at nominal operating voltage, and 25°C (77°F). Total harmonic distortion induced into an AC power line by the module, operated at nominal operating voltage, at 25°C (77°F) shall not exceed 20%.

MODULE FUNCTIONS

A. Cycle

The module shall operate in one mode: <u>Clearance Cycle Countdown Mode Only.</u> The module will start counting when the flashing clearance signal turns on and will countdown to "0" and turn off when the steady "Don't Walk" signal turns on. <u>Module will not have user accessible switches or controls for modification of cycle.</u>

B. Learning Cycle

At power on, the module enters a single automatic learning cycle. During the automatic learning cycle, the countdown display shall remain dark.

C. Cycle Modification

The unit re-programs itself if it detects any increase or decrease of Pedestrian Timing. The counting unit will go blank once a change is detected and then take one complete pedestrian cycle (with no counter during this cycle) to adjust its buffer timer.

D. Recycling

The module shall allow for consecutive cycles without displaying the steady Hand icon ("Don't Walk").

E. Preemption

The module shall recognize preemption events and temporarily modify the crossing cycle accordingly. If the controller preempts during the walking man, the countdown will follow the controller's directions and will adjust from walking man to flashing hand. It will start to count down during the flashing hand. If the controller preempts during the flashing hand, the countdown will continue to count down without interruption. The next cycle, following the preemption event, shall use the correct, initially programmed values.

F. "Don't Walk" Steady

If the controller output displays Don't Walk steady condition and the unit has not arrived to zero or if both the hand and man are dark for some reason, the unit suspends any timing and the digits will go dark.

QUALITY ASSURANCE

A. General

Unless otherwise specified all of the test will be conducted at an ambient temperature of 25°C and at the nominal operating voltage of 120 VAC RMS.

The following production quality assurance tests shall be performed on each new module prior to shipment. Before any measurements are made, the unit shall be energized at the rated voltage for a 30-minute burn-in period at an ambient temperature of +25°C (+77°F). Following the burn-in period, the initial luminous intensity shall be measured. A single point measurement with a correlation to the intensity requirement of Section 1.04 of VTCSH for circular indications may be used. The current flow and power factor shall also be determined. Units found to have parameters outside the ranges allowed by this specification shall be rejected.

The modules shall be manufactured in accordance with a vendor quality assurance (QA) program. The QA program shall include two types of quality assurance: (1) design quality assurance and (2) production quality assurance. QA process and test result documentation shall be kept on file for a minimum period of seven years.

B. Conformance

The module designs not satisfying design qualification testing and the production quality assurance testing performance requirements shall not be labeled, advertised, or sold as conforming to this specification.

C. Design Qualification Assurance

Design Qualification testing shall be performed on new module designs, and when a major design change has been implemented on an existing design. Unless otherwise specified, all of the tests shall be conducted on the same set of randomly selected modules, hereafter called the sample set, at an ambient temperature of

25°C and at the nominal operating voltage of 120 VAC RMS. Testing shall be performed once every 5 years or when the module design or LED technology has been changed. Test data shall be retained by the module manufacturers for a minimum period of 7 years and for a period of at least 5 years beyond the last date of manufacture of that model type.

D. Production Quality Assurance

All new modules shall undergo Production Quality Assurance testing prior to shipment. Failure of any module to meet requirements of the QA tests shall be cause for rejection. QA test results shall be maintained for a period of 4 years. The production quality assurance shall include statistically controlled routine tests to ensure minimum performance levels of modules built to meet this specification. Prior to packaging for shipment, each module shall be visually inspected for any exterior physical damage or assembly anomalies. Careful attention shall be paid to the surface of the lens to ensure there are no scratches (abrasions), cracks, chips, discoloration or other defects.

E. Delivery and Acceptance

After the award of contract has been made to the successful bidder and delivery has been received, the City of San Antonio may engage an independent testing laboratory to perform qualification testing on ten units randomly selected. Failure to meet the requirements of this specification by two or more sample units representing any line item will result in all the units furnished for that line item being rejected. The City of San Antonio will notify the vendor of this rejection. Upon receipt of rejection notice, vendor shall make arrangements immediately for return of product. The vendor shall become responsible for all shipping costs and the cost of the independent laboratory testing.

Compatibility with a controller unit, conflict monitor and load switch will be tested by connecting the module under test to the output of a standard load switch connected to a variable AC voltage supply with the output of the load switch in the off state. The AC voltage developed across each LED module so connected shall not exceed ten (10) Vrms as the input to the LED module is varied from 95 Vrms to 135 Vrms.

WARRANTY

LED signal modules shall be replaced or repaired if it fails to function as intended due to workmanship or material defects within the first 60 months from date of delivery.

PRICE SCHEDULE

<u>Item</u>	Estimated Qty.	<u>Description</u>	
1	100 Each	16" Pedestrian Countdown Timers	
		\$Each	
Bra		Brand & Model #	
Delive	erv will be made within	calendar days after receipt of order.	

SOLICITATION QUESTIONNAIRE

The City of San Antonio Purchasing and General Services Department constantly strives to improve competitive bidding with historically underutilized enterprises. In order to facilitate these improvements, we would like to know how you were informed that this Invitation for Bid was active and how you may have received a copy of the document.

How did you learn of this bid opportunity?	
Direct Contact with Purchasing & General Services City of San Antonio Website (www.sanantonio.gov) Bid notification service (i.e. Demandstar) Newspaper or trade publication City Information Cable Channel 21 Another Vendor or Supplier Other Means: Describe	
How did you obtain your copy of the Bid Document?	
Direct Contact with Purchasing & General Services	
Via Email	
City of San Antonio Website (<u>www.sanantonio.com</u>)	
Bid notification service (i.e. Demandstar)	
Via Email	
Other Means: Describe	

Note: Questionnaire to accompany bid submittal

IMPORTANT MAILING INSTRUCTIONS:

MAIL TO: CITY CLERK

P.O. BOX 839966

SAN ANTONIO, TX 78283-3966

PHYSICAL ADDRESS: CITY CLERK

CITY HALL (COMMERCE ST. & FLORES ST.)

100 MILITARY PLAZA, 2ND FLOOR

SAN ANTONIO, TEXAS 78205

MARK ENVELOPE: "BID TO FURNISH PEDESTRIAN COUNTDOWN TIMERS"

BIDS TO BE OPENED: 2:00 P.M., SEPTEMBER 12, 2005

BID NO. A967-06 DG

REMARKS: